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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARVEY, DIONNE

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,197

Applicant(s)

GESKUS, MIKE

Examiner

Dionne N. Harvey

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 15 August 2004 and 10 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8,10,12-14,16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-8,10,12-14,16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, including claims, 1,3,5-8,10,12-14, 16 and 18-21 in the reply filed on 8/15/2005 is acknowledged. The traversal is on the ground(s) that the Examiner has already established there is no undue burden by examining all claims. This is not found persuasive because in the response filed 6/13/2005, with regard to claims 22-24, the Applicant disagreed with the Examiner's search and subsequent choice of prior art reference, necessitating a different search. Therefore, the restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1,3,5-8,10,12-14,16 and 18-21** are rejected under 35

U.S.C. 102(e) as being anticipated by **Killion U.S. 6,151,399**.

Regarding claims 1 and 8, **shown in figure 9B**, Killion teaches a directional microphone assembly, comprising: a surface part **180** having at least two inlet holes **184,183**;

In **figure 9A**, a microphone **20** having at least two sound inlets;
and means for transporting sound **186,185** from each inlet hole **184,183** to a respective sound inlet, the transporting means are hollow and at least substantially rigid.

In **column 9, lines 65-66 - column 10, line 3**, Killion teaches that passages **185, 186** and **187** may be chosen to duplicate at acoustic properties of tubes **85** and **86** of **figure 3**, reading on "the hollow transporting means are dimensioned"; and further teaches combining said passages **185, 186** and **187**, with specific acoustic resistances, such that the desired frequency response may be obtained, which reads on "in such a way that a frequency response of the transporting means are optimized."

Regarding claim 3, shown in **figure 12** and discussed in **column 11, lines 32-36**, Killion further teaches a damper grid (**349**) placed on an inner surface of the means for transporting sound to the inlet, which is acting as a sound passage for front volume.

Regarding claim 5, in **figure 9A**, Killion teaches that the transporting means **185,187,186** are attached to the microphone **20**.

Regarding claim 6, in **figure 9A**, Killion teaches that at least one of the transporting means comprises a sound-delaying filter **181**.

Regarding claim 7, Killion teaches use in a hearing aid.

Regarding claim 10, shown in **figure 12** and discussed in **column 11, lines 32-36**, Killion further teaches a damper grid (**349**) placed on an inner surface of the means for transporting sound to the inlet, which is acting as a sound passage for front volume.

Regarding claim 12, in **figure 9A**, Killion teaches that the transporting means **185,187,186** are attached to the microphone **20**.

Regarding claim 13, in **figure 9A**, Killion teaches that at least one of the transporting means comprises a sound-delaying filter **181**.

Regarding claim 14, shown in **figure 9A**, Killion teaches the assembly comprising: a microphone having at least two sound inlets **183, 184**; and transporting means **185,186** attached to the microphone **20** and being adapted to transport sound from predetermined positions to a respective sound inlet, the transporting means being hollow and at least substantially rigid .

Regarding claim 16, shown in **figure 12** and discussed in **column 11, lines 32-36**, Killion further teaches a damper grid (**349**) placed on an inner surface of the means for transporting sound to the inlet, which is acting as a sound passage for front volume.

Regarding claim 18, shown in **figure 9A**, Killion teaches that the transporting means **185,186** are adapted to abut or engage an element defining the surface part **180** having sound inlet holes **183,184**, the transporting means abutting or engaging the element at sound inlet holes thereof.

Regarding claim 19, in **figure 9A**, Killion teaches that at least one of the transporting means comprises an acoustical sound delaying filter **181,182**.

Regarding claim 20, in **column 7, lines 54-55**, Killion teaches that the delay of the system at least substantially corresponds to a distance between two microphones. Killion does not clearly teach that the sound delay corresponds to the distance between two predetermined positions divided by the velocity of sound in air at sea level. However, it is well known in the art to use "sea level" measurements, as this is representative of standard temperature and pressure. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to calibrate said device by said standard, according to which the device may be altered to accommodate other users.

Regarding claim 21, Killion does not clearly teach that the sound-delaying filter is adapted to provide a sound delay corresponding to $0.33-0.57$ times a distance between two inlet holes in the surface part divided by the speed of sound. However, Killion does not restrict to any specific time delay for the system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to change the delay time dependent upon the desired frequency response for the system.

Response to Arguments

3. Applicant's arguments with respect to claims 1,3,5-8,10,12-14,16 and 18-21 have been considered but are moot in view of the new ground(s) of rejection based on a new interpretation of the Killion reference.

Conclusion

4. Applicant's amendment of 9/10/2004 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N. Harvey whose telephone number is 571-272-7497. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dionne Harvey


SUHAN NI
PRIMARY EXAMINER